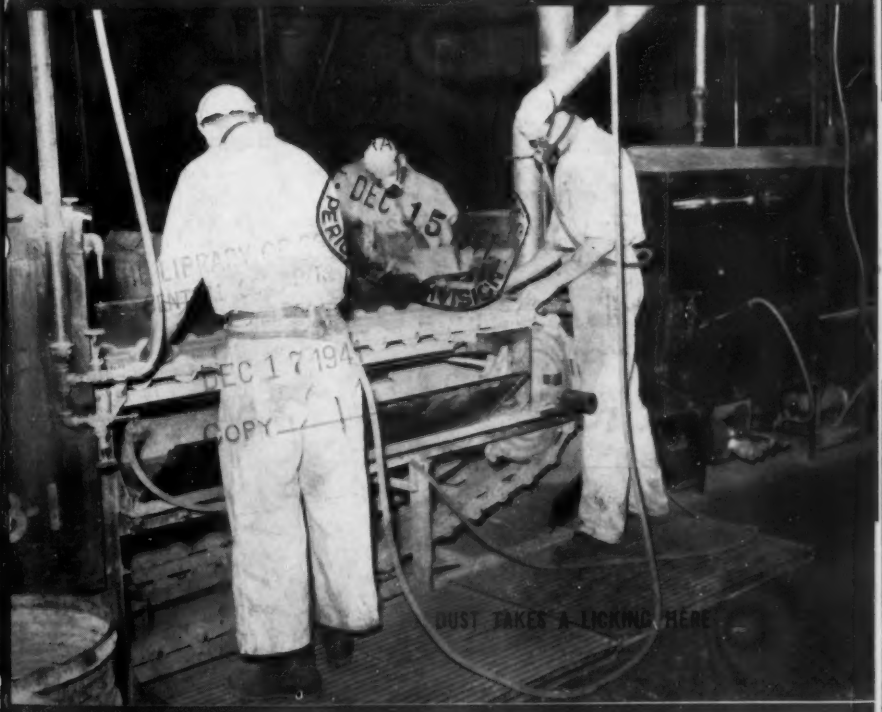
★ OCCUPATIONAL ★ HAZARDS

DECEMBER 1941

There's Profit in PREVENTION



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THE ONLY MANAGEMENT PUBLICATION DEVOTED TO THE ENGINEERING CONTROL OF
Dusts • Fumes • Vapors • Gases • Organic Solvents • Dermatitis • Industrial Sanitation • Industrial Health and Safety

Safeguard the Health of Workers

With KIRK & BLUM

DUST CONTROL SYSTEMS

Dust control systems that could be operated with exceptional flexibility were required by this machine tool manufacturer. KIRK & BLUM Engineers met every condition with these highly efficient overhead units.

Almost every type of grinding, snagging, sanding and cleaning operated over floor grills, on round tables and roller conveyors is served by these and other KIRK & BLUM Dust Control Systems, which exhaust a total of 20,000 cubic feet of air per minute in this plant.

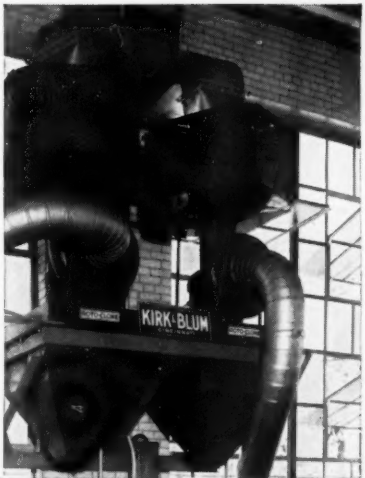
Health of workers is safeguarded—efficiency and production stepped up.

Write for Catalogs.

"Dust Control Systems in Metal Industries"

"Fan Systems in various Industries"

"Industrial Ovens"



THE KIRK & BLUM MANUFACTURING, CO.

2802 SPRING GROVE AVE. CINCINNATI, OHIO

Why put HURDLES in the way of FOOT SAFETY in your plant?
Unless your men can be assured of proper fit and genuine comfort you've a high hurdle to surmount in getting them to start—and to keep on—wearing Safety Shoes.
But, as we have proved in hundreds of the Nation's leading plants, men readily will take to Thom McAn's Fitmaster Safety Shoes. They're lighter weight—fit and feel more like regular street shoes. They're made to special measurements based on our original research. And they're fitted in our own stores, by our own trained fitters . . . Yes, Thom McAn's PACKAGED Foot Safety Plan removes both the hurdles and the headaches from your foot accident reduction program—and without cost to you. Read the details below.
THE Thom McAn
PACKAGED Foot Safety Plan
1. We stock our famous Fitmaster Safety Shoes for your plant in our Thom McAn stores—without cost or obligation on your part.
2. We fit our Fitmaster Safety Shoes with our own trained men right in our stores, and take full responsibility for assuring your workers' foot comfort.
3. We please your men (an important point these days), because our Fitmaster Safety Shoes look better, feel better, cost them less than other brands.
ONLY Thom McAn offers Foot Safety PACKAGED.
For complete information regarding this modern, efficient, unique new plan—
Write: THOM McAN—SAFETY SHOE DIVISION—25 WEST 43RD STREET, NEW YORK, N. Y.
STORES IN 347 CITIES • 50 MILLION PAIRS SOLD SINCE 1935 ALONE

DEFEND Your Eyes and Face

—At Low Cost

Jackson's popular C-Line shields have won the confidence of thousands of workmen engaged in gun, flash and spot welding, metal pouring, scaling, wood working and many other operations where the eyes and face require protection. Light in weight, they are well ventilated, comfortable. Flexible visors (adjustable at *any* angle) provide wide, unhampered vision. Sparks do not effect them nor will hot metal stick. Standard visor depth 4"—others to 9". Available in five shades: Clear, smoked, amber, light and dark green.

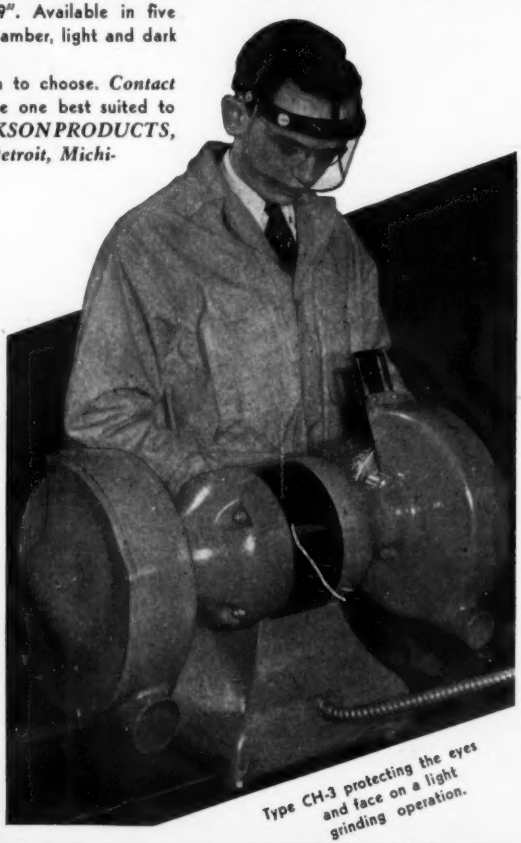
Six types from which to choose. *Contact your dealer,* select the one best suited to your need or write *JACKSON PRODUCTS, 3265 Wight Street, Detroit, Michigan.*

QUALITY JACKSON PRODUCTS

•

The Jackson Eye-shield Folder illustrates and describes our complete line of devices for protecting the eyes and face. You'll find it interesting. Write for your copy today.

•



Type CH-3 protecting the eyes and face on a light grinding operation.

WOMEN IN INDUSTRY

ARE YOU PROVIDING ADEQUATE AND SANITARY WASHING FACILITIES?

Women again are being called upon by industry, and they demand orderliness and cleanliness.

Widely used in leading plants of all kinds, Bradley Washfountains are ideal where women are employed from the standpoint of sanitation alone, since each user washes in clean, running water. But Bradleys also provide more washing facilities in a given space, and each fixture serves a group of 8 to 10 persons simultaneously. Piping and piping connections are 85 to 90 per cent less than with conventional single-person wash basins; and consumption of water is reduced by 70 per cent.

Our Washroom Consultants will help lay out your washrooms. BRADLEY WASHFOUNTAIN CO., 2259 W. Michigan St., Milwaukee, Wis.

BRADLEY *washfountains*

Illustrated are typical washrooms equipped with Bradley Washfountains.

VITAL TO DEFENSE ☆ ☆ ☆

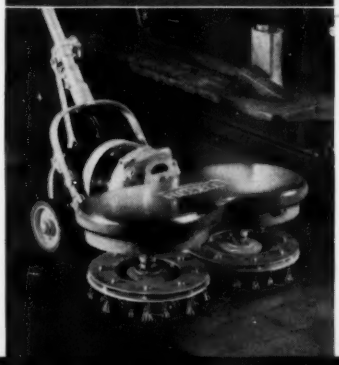
CLEAN, Safe FLOORS for Workers

In your efforts to help conserve the Nation's man-power through intensified accident prevention programs, you won't want to overlook the fact that approximately 18% of all industrial injuries were the result of falls (according to *Accident Facts*, 1941)... due to slippery floors and other causes.

Are you satisfied that the floor-maintenance equipment you are now using is adequate to your present needs? Is it capable of thoroughly removing oil, grease and other slippery substances, as well as dirt, shavings, et cetera?

When it comes to solving individual floor-maintenance problems, *Finnell* can be of real service to you. With equipment in a range of models and sizes that meets the varied requirements of *all* the industries served, *Finnell* is prepared to give you dependable, unbiased advice as to the type and size machine that's right for *your specific needs.*

NOW IS THE TIME to check up on your floor-maintenance equipment. Without obligating you in any way, the nearby *Finnell* man will be glad to help you. For free floor survey, consultation, demonstration, or literature, phone nearest *Finnell* branch, or write Finnell System, Inc., 3512 East Street, Elkhart, Indiana.



FINNELL SYSTEM, Inc.

Pioneers and Specialists in FLOOR MAINTENANCE EQUIPMENT

There's Profit in Prevention

OCCUPATIONAL Hazards

DECEMBER 1941

VOLUME 4 NUMBER 3

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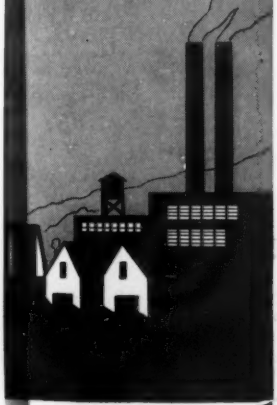
Jack Weiss, Editor



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Employees get the best at Bruning

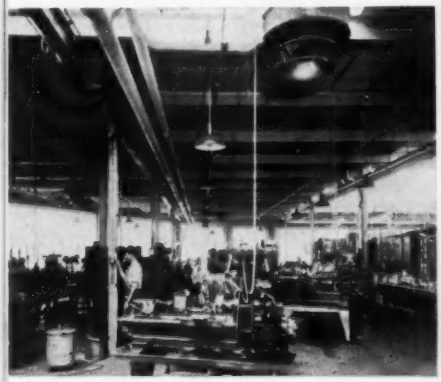
The experience of the Bruning Company suggests a trend in the industrial hygiene and safety field. Many new plants are installing modern conveniences for workers.

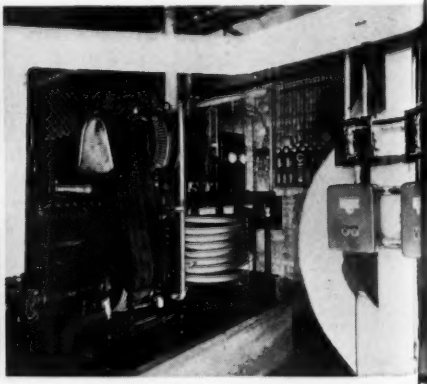
EMPLOYEE comfort and convenience were primary considerations in designing the new plant and office building of the Charles Bruning Co., Inc., Chicago, Illinois. Safety precautions have been taken throughout the building, and first aid is conveniently available. Generous washroom facilities are provided, and women employees of the company have been furnished with an unusually well-equipped rest room.

Air Conditioned

The offices of the plant are air conditioned for employee comfort, and the entire plant is heated by unit heaters. Large circular, fan-type heaters, specially designed to diffuse heat in all directions, may be regulated by employees to suit their convenience. The entire building is of fireproof construction and equipped with automatic sprinklers. The ceilings are of metal acoustical tile, which is sound-deadening, and

Large fan-type heaters especially designed to diffuse heat in all directions are installed. Note ceiling is constructed of metal acoustical tile. Power room well protected.





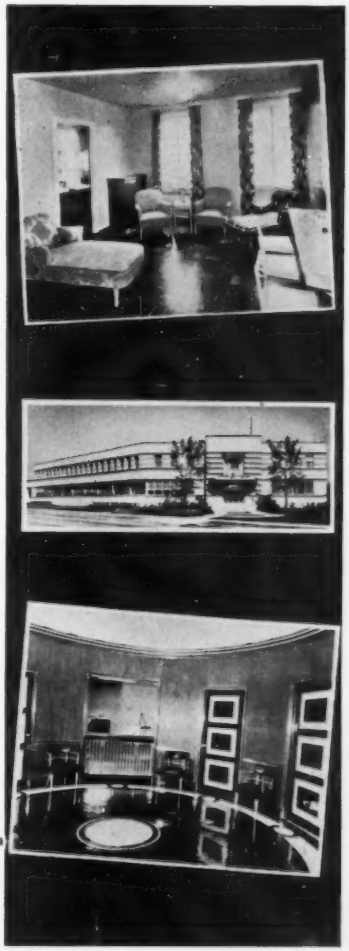
which affords additional ventilation.

A 14-foot driveway along one side of the building, leads to a large employee parking lot at the rear of the plant.

Planned for Greater Convenience

In planning this building for the Charles Bruning Company, manufacturers of sensitized papers and cloths, the architect arranged the offices and shops in such a manner that work will flow freely from one department to another. Thus, employees are able to carry on their work with greater convenience.

For example, the sales offices on the second floor are in direct contact with the stockroom below, both being serviced by a special correspondence lift. The second floor chemical mixing room is provided with a special sidewalk-type lift, to facilitate the receipt of bulk chemicals. All of the entire first floor is only six inches above grade level to eliminate the necessity of lifting material or equipment, and the Shipping and Receiving Department is accessible to all parts of the plant. The machine shop is laid out for the greatest convenience, the tool crib and stockroom being approximately in the center of the shop.



From top to bottom: Lovely lounge made available for female employees. Building replete in modern design. Plant, artistically landscaped. Waiting room gives an impression of considerate Management.

What about Young Workers

Young worker employed in mine.

Last month's article discussed the increasingly important role played by young workers in industry as a consequence of the "battle of production." It explained how the rise in the employment of youth, coupled with the rise in industrial accidents, has increased the need for limiting minors under 18 years of age to jobs they can fill without undue risk of injury. The article analyzed the provisions of the Fair Labor Standards Act of 1938 in this regard and the methods used by the Children's Bureau of the United States Department of Labor in making determinations of occupations hazardous for the employment of minors 16 and 17 years of age.

In this article it is proposed to examine the progress made by the Children's Bureau in its hazardous-occupations program and to present briefly the provisions of the hazardous-occupations orders already issued as well as the outstanding findings on which they are based.

Occupations in explosives manufacture

Since July 1, 1939, the minimum age for employment in plants manufacturing explosives and articles containing explosive components has been 18 years. On that date Hazardous-Occupations Order No. 1, declaring occupations in this industry to be particularly hazardous for the employment of minors 16 and 17 years of age, was issued by the Chief of the Children's Bureau. The investigation made prior to the issuance of the order showed that on the basis of available data the accident-severity rate for explosives manufacture in 1936 was about twice as great as the average for all manufacturing

By S. W. Homan and Saul Wallen
Children's Bureau
U. S. Department of Labor

industries. Although the frequency rate was found to be not high, a large proportion of the injuries due to explosion are serious or fatal. Eleven States and many leading employers had already fixed 18 years as the minimum employment age in this industry, so the order served to bring the remainder of the industry to the standard already observed by its more advanced sections.

How fortunate for our youth that they can no longer be legally employed in explosives-manufacturing plants! In 1940 there was a tremendous expansion in employment in the explosives industry, and an even greater increase in the number of injuries. Employee-hours worked increased 32 per cent between 1939 and 1940, but injuries increased 297 per cent! Whereas in 1939, according to data published by the Bureau of Labor Statistics of the United States Department of Labor, the frequency rate for the explosives industry was 5.4 injuries per 1,000,000 employee-hours worked, in 1940 the frequency rate for the identical firms was 16.2. The jump in the severity rate was even more startling—from 3.7 days lost per 1,000 employee-hours worked in 1939 to 31.4 in 1940. (By way of contrast, the severity rate for all manufacturing in 1940 was 1.6). In 1939 there were 79 deaths in each thousand injuries occurring in explosives-manufacturing plants; in

(Please turn to page 28)

National Defense is throwing a heavy weight upon the shoulders of young workers. Here are two skilled operations being capably performed by boys under 21. The obvious lack of protective equipment indicates the job to be done in this direction.

Hamilton never misses an opportunity to let other people know what they're doing.

Hamilton Foundry Makes Industrial Hygiene Pay

By **P. E. RENTSCHLER, President Hamilton Foundry & Machine Co., Hamilton, Ohio**

All of our efforts have been with the individual and the entire plant group and not departmental groups. We feel the departments vary too much in size, the hazards of the work in each department differ too greatly, and the types of employees are to dissimilar to split our efforts.

Results

In 18 months, 415 safety and hygiene recommendations have been turned in by men in the shop of which 54 were hygiene recommendations and 361 safety recommendations. Of the latter, 65 covered maintenance and three fire hazards. To date, the recommendation that has cost the most cash outlay is one that came from several molding machine operators at various times, requesting better lighting in No. 3 foundry. The cost was approximately $2,000.

The new lighting system was "just one of those things" we had in our minds for a long time. However, we had never before had anything to give us the push to make us decide to spend the money for this improvement, until it came to

the management on numerous occasions from men working in the department through the Safety and Hygiene Recommendation Card system.

In our safety meetings, beside going over the recommendation cards previously referred to, the accident reports and first aid cases for the previous month are reviewed in detail. These figures are accumulated periodically, monthly, by quarters, by the half year, and by the year.

The First Aid Report for 1939, with an average employment of 222 for the year, working 432,000 hours, showed 440 cases of first aid treatments other than those requiring a physician's care, as follows:

69 burns
125 cuts
25 abrasions
58 bruises
65 foreign bodies in eyes
22 foreign bodies elsewhere, splinters, etc.
18 mashed fingers
26 lacerations
27 strains
2 heat prostrations
3 mashed toes (each such injury sold more safety toe shoes)

First Aid. We are constantly having more calls for first aid treatments, sometimes for injuries so minor that the call might seem ridiculous, but we encourage the attention to minor injuries, and attribute this attention to our constant efforts and reminders that every injury, however slight, should be cared for immediately.

Use of Accident Reports. With our accident reports, we stress at the safety meetings the cost of accidents. Each month we give the committeemen the days lost and the compensation paid for each lost time accident.

Comparisons of Accidents and Compensations. In the year 1937, we had 62 accidents that required a physician's care. We averaged 296 employees, with a peak employment during the year of 326 men, and a low of 215. We added 161 new men during the year and our total awards from the Industrial Commission were $1,707.12. In 1938, we had 25 accidents of the same type and awards dropped to $413.53. In that year, we averaged 203 employes with 22 as the high and a low of 187 with 6 men added.

In the year 1939, we had 36 accidents requiring a physician's care

Visual presentations are always helpful in promotional safety. Here's an example.

with a total cost of $773.46 awarded. There were about 20 per cent less man-hours in 1939, and comparing our compensation awards, there was a drop of almost $1,000 in awards, from $1,707.12 to $773.46.

Tell the men the cost of Accidents

In addition to keeping the men informed on current accident conditions, we find that the men are greatly surprised and interested in the figures showing the total cost of cases that "drag" along. We show them the figures on each individual case as they accumulate, and then, of course, show the final cost of a case. The men, themselves, have no idea of the cost of industrial injuries, not only to the company, but to the individual on compensation; and no idea of the suffering that some individuals undergo, unless it is one who is a particularly close friend with whom they are in constant contact. We feel that by giving the men the details of each case, they realize from discussions of details that what was apparently a minor injury, perhaps a scratch that was neglected, may end in terific suffering and loss of earnings to the individual and a high money cost to the company.

Dramatize Lost Time Record

Our method of calling attention to a lost time accident is to dramatize it. We drape a crêpe over our record sign "Days Since Last Lost Time Accident" and a placard stating "No Lost Time Accident Record *Buried* Today." Next day, the sign reads "No Lost Time Accident Record *Buried* Yesterday" as we start for a new goal.

Unsafe Tools

At these safety meetings, we also stress the use of unsafe tools and equipment. We have a practice that, at irregular intervals, our safety director goes through the plant searching for any unsafe tools or equipment. Of course, committee members, or any one in the shop, is instructed to bring in any unsafe equipment. These articles are exhibited at the next safety meeting, and posted on the board provided for unsafe equipment, as a permanent exhibit.

Men Propose Rules

By reason of the free discussions of the men in the meetings, we have developed some safe practice rules that the men themselves have requested. For instance, the rule *"Men exposed to molten metal must wear proper clothing,"* is the result of a man being burned because he was working without a shirt. The rule *"Goggles must be worn by anyone who enters the Cleaning Department,"* resulted from a molder entering the chipping department to inspect his work and suffering an eye injury while there. Incidentally, he was wearing his goggles on his forehead.

Duties of Safety Committee

Members of the Safety Committee assist in plant inspections. In this way, they learn, first hand, the health and safety conditions that are too freely discussed only in the abstract. We have inspection forms that are used in inspecting various

parts of the plant and various safety appliances. These are greatly detailed, so that all reasonable precautions are taken to make a complete inspection. We feel that by having a workman as one of the inspectors, along with the foreman of the department and the safety director, that the workman acquires a knowledge of safety and hygiene that he cannot acquire in any other manner.

Results of Open-House

After conducting open-house activities for workers and their families, we noticed an increase in the use of safety and health facilities. We feel that since that event we have had less difficulty in introducing new practices and new equipment than previously. In the case of safety shoes, where we had sold only 23 pairs in 11 months up to the time of our open-house, or had 13 per cent users of safety shoes, we jumped up to 62 per cent users in the five months after the event, and to 97.2 per cent in the following 13 months. We attribute much of this increase in the use of safety shoes to our open-house educational shoe display and efforts, and the balance to accidents resulting in two injuries.

Résumé for Hamilton Plant

In conclusion, I will give a summary of the methods used to create and maintain interest in our safety and hygiene program:

I. Developed a health consciousness by
  (1) Physical examinations, including urinalysis, chest x-rays and blood tests.
  (2) Reported findings to each individual. Men have consulted their doctors, to our knowledge, for the following:

	In 1938	In 1940
Subnormal eyes.	9	10
Blindness in one eye	3	3
Cataract Removed	1	0
High and Low Blood Pressure	13	24
Sugar	5	2
Albumen	2	7
Diabetes	1	2
Heart Condition.	1	9
Tuberculosis	3	0
Hernia	7	9
		4
Teeth	4	5
Impaired Hearing	2	2
Positive Wasserman	8	8

  (3) Interest in health lectures and literature.
  (4) 54 hygiene recommendations by the Safety and Hygiene Committee reported from

(Please turn to page 29)

PLANT EMPLOYEES... *like* *La Grace*
POWDERED HAND SOAPS
For quick, thorough, easy-on-the-skin clean-ups.
Write for Free Trial
LIGHTFOOT SCHULTZ CO.
663 FIFTH AVENUE, NEW YORK

Control of Welding Hazards in Defense Industries Is New Bulletin Available

The Division of Labor Standards, U. S. Department of Labor, announces the issuance of a fifth bulletin in its special defense series entitled "Control of Welding Hazards in Defense Industries."

The use of welding, both electric and oxyacetylene, has received a tremendous stimulus under the National Defense Program. Already an important method of metal fabrication, increased production of metal products for defense needs not only has stepped up use of welding methods in existing operations, but has brought such operations into use in many new fields and in shops and plants where welding heretofore has not been done. The use of new fluxes, coated rods and welding in confined spaces calls for special attention to the health hazards associated with welding and cutting operations.

This bulletin is largely the work of Professor Philip Drinker of the Harvard School of Public Health, with a special section on Oxyacetylene Welding prepared by the technical staff of the Division of Labor Standards with the assistance of Dr. A. G. Cranch of the Union Carbide and Carbon Corporation.

The Division is prepared to provide interested groups and individuals with copies of this publication as long as the supply remains available.

Address requests to Editor, Occupational Hazards Magazine, 812 Huron Rd., Cleveland, Ohio.

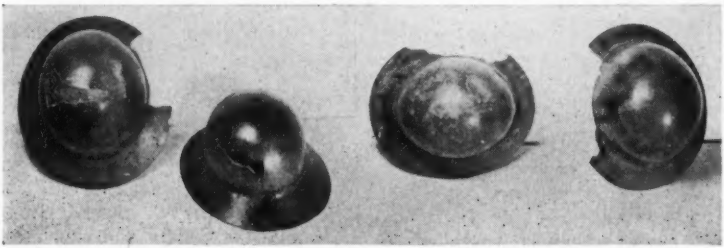
* * *

Speed Limit Set

From the Fisher Body Pontiac Division of General Motors Corporation comes the practical idea of limiting the speed of all industrial trucks. All of their trucks were run at full speed over a course 132 feet long and accurately clocked to determine the maximum travel speed. The speeds varied from 4.5 to 9.5 miles per hour. Adjustments were made to limit the maximum speed of each truck to seven miles per hour or less.

Here is a timely suggestion.

They'll never be without SAFETY HATS.



These safety hats were worn by members of an oil company's drilling crew and each is actually credited with saving a man's life.

1½ Billion Hours Being Lost Via Accidents in Industry

Accident and sickness combined are costing the nation nearly 4,000,000,000 man-hours of working time on an annual basis as the tide of accidents precipitated by the stress of defense production rises, Holgar J. Johnson, president of the Institute of Life Insurance, declared today in an address before the 32nd annual meeting of the International Claim Assn here.

Every employer, employee and individual citizen was urged to respond to President Roosevelt's call for a nation-wide "war" on accidents.

"These 4,000,000,000 man-hours now being lost through disability, if applied to defense production, would be enough to produce 10,000 heavy bombers, 20,000 fighter planes, 30,000 light tanks and 20 battleships."

Defense industries directly feel approximately one-tenth of the disability among workmen, or 400,000,000 man-hours, he explained, adding that "all such time loss, whether in defense plants or not, weakens the production machinery of the nation as well as causing a financing loss to the families and work benches involved."

"Through accident and health, disability, workmen's compensation and hospitalization insurance more than $400,000,000 annually is being paid out by insurance companies to American families for accident and sickness claims. This compares with $78,000,000 annually in the preparedness days of 1917.

"This is the financial side of the ledger. There is another side which is of even greater importance. Conservation of man-power is vital today if America is to function with full effectiveness as the arsenal of the democracies, and anything helping to reduce the loss of man-hours of working time through curbing accidents or illness is contribution to the defense of the nation.

"During the first half of 1941 accidental deaths have increased over the same period of 1940, and the tempo of production is still increasing in defense plants.

ONE OUT OF EVERY EIGHT industrial accidents involves a workman's feet or toes, according to statistics of the National Safety Council.

187½ MILLION MAN-HOURS CAN BE SAVED next year by providing adequate foot and toe protection for every man in industry!

THAT'S ENOUGH TO GIVE AMERICA AN ADDITIONAL:

500 HEAVY BOMBERS

1100 FIGHTER PLANES

2000 LIGHT TANKS

3 BATTLESHIPS

THIS "BOMBPROOF SHELTER" in the toe of every Lehigh Safety Shoe gives the utmost in toe-protection to men working with heavy objects.

11 DIFFERENT TYPES OF SOLES available in Lehigh Safety Shoes alone, also help reduce bone-breaking slips and falls because they're "engineered to fit floor conditions."

TODAY, when production schedules prevent proper safety-training of new employees, **Lehigh Safety Shoes rate 1A priority in your safety program.**

DO YOUR BIT TO SAVE 187½ MILLION MAN-HOURS BY WRITING TO LEHIGH TODAY!

LEHIGH SAFETY SHOE CO., INC., ALLENTOWN, PA.

Broadcasting station located in the safety department headquarters.

We have placed throughout our mills at strategic locations, seven large high and low frequency loud speakers for the purpose of reaching approximately 12,000 employees as they enter and leave the gates at the change of turns with safety talks.

A Central Broadcasting Station is located at the general headquarters of the Safety Department in the Safety Department Central Storeroom and offices and from this central broadcasting station broadcasts are made three days a week at the afternoon change of turn from 2:30 to 4:30 and the night change of turn from 10:00 P.M. to 11:30 P.M. In this manner all of the 12,000 employees are reached with various safety messages.

The policy or setup is, we broadcast a few words of safety followed by a few seconds of music, with an interruption for safety talk, and again interrupting with some music and continuing in this manner throughout the broadcast. In this way the attention of the employees as they enter and leave the gates is attracted by the

Wirton Steel Is on the AIR

By L. BANGERT, Safety Director

Separate building is the hub around which safety movement revolves.

music and while they are listening to the music it is suddenly shut off and a safety talk follows.

We have found this to be far superior to the old way of holding safety meetings in the mills where only a hand full of employees are reached at each meeting. To create an interest in the broadcasting, we have solicited the employees to submit requests for the music they desire and for safety material that might be used in the broadcast. We have confined the music entirely to orchestra and band music as we have found that when the vocal is used in the music, it confuses the employee with the vocal safety talk.

Safety Shoes Increased 50%

A remarkable thing about the

SAFETY FIRST
for
all
STRAIGHT
LADDERS

DAYTON UNIVERSAL SAFETY LADDER SHOES are easily installed on your present straight ladders. These shoes prevent slipping. Your choice of renewable treads—Rubber Suction Grip—Neoprene Suction Grip—Suberac Cork Treads. Tempered steel spike toes for all weather use.

Write for Prices and Catalog

The DAYTON Safety Ladder Co

121-123 W. THIRD ST.
CINNCINATI, OHIO

broadcasting is the fact that we have obtained the latest and most refined and scientifically correct loud speakers which are heard only at the gates but are carried into the mills where the men are working on the job and while they work they listen to safety talks. Interest of the employees has been aroused to such an extent that when we miss a broadcast the various employees inquire of us as to why we were not on the air.

For a time we hammered away over the loud speakers cautioning the employees to use more care in preventing injuries to the feet and we believe that this constant campaign in the interest of foot injuries in addition to the campaign we put on for safety shoes have substantially reduced our foot injuries. We estimate that this campaign has increased the wearing of safety shoes throughout our mills approximately 50%.

We have attempted to confine the use of this loud speaker system exclusively to safety matters, however, the effectiveness of the system is shown where on a few occasions we used it to broadcast a change of company policy or an increase in wages and it was found that within a few minutes time approximately 12,000 employees were informed of the message. This broadcasting system eliminates any misunderstanding that might result when various supervisors set forth company policy or safety policies, it being found that interpretation of the policies may be as varied as the number of supervisors; however, with the broadcasting system there can be no misunderstanding or confusion as to the definiteness or clearness of the policy.

Aside from covering the various plants located in Weirton, West Virginia, with this system, we have leased a telephone line from Weirton, West Virginia to our plant at Steubenville, Ohio, a distance of approximately four miles and installed a loud speaker in that plant which in turn is connected to our Central Broadcasting Station in the general headquarters in Weirton.

Write for leaflet

"SAFE HANDLING OF ACIDS AND CHEMICALS"

showing a full line of protective equipment

Wherever acids and chemicals are handled, serious danger exists. To meet these hazards, Pulmosan has assembled a group of specially designed safeguards including Aprons, Gloves, Sleeves, Hoods, Goggles, Fume and Dust Respirators, Face Shields, Carboy Truck and Tilter, Siphons, Acidproof Pails and Dippers, Skin Creams, etc. Each item is thoroughly tested and provides dependable protection. Let us know your requirements.

PULMOSAN

SAFETY EQUIPMENT CORP.

Dept. OH, 176 Johnson St., Brooklyn, N.Y.

Silicosis in Odd Places

Normally, one thinks of finding silicosis hazards in the foundries, in the potteries, in the floor and wall tile plants, and in the stone cutting industry, but sometimes workmen are exposed to silica dust in industries foreign to those generally considered as hazardous. Management often does not realize that it is subjecting those who handle silica flour or operate a small unventilated sand blast for a short time each day, to a lung disease that might terminate the life of an employee many years before his normal time.

Recently, the Industrial Commission of Ohio awarded a claim for total disability due to silicosis to an employee of a paint manufacturing plant. Investigation showed that the management did not realize that there was anything in the plant that could cause silicosis. This plant manufactured several types of paint, one of which was a roofing mixture consisting of a liquid asphalt, silica flour and asbestos. The inert ingredients were mixed with the asphaltum in large tanks.

The asphaltum solution was first pumped into the tank and agitated; then the affected employee dumped silica flour and ground asbestos through a chute, located on the second floor, into the asphaltum tanks. The silica flour was purchased in paper bags. The employee cut the bag and dumped the silica. He would shake the bag, not knowing that the dust stirred into the air was slowly strangulating his

respiratory system and would, in time, totally disable him. He did likewise with the asbestos which was purchased in jute bags. Both of these powders cause a fibrotic condition to develop in the lungs, termed silicosis and asbestosis.

Had the management known what the outcome might be, not a man among them would have allowed their employees to work in such a condition. They would have installed a ventilation system at the chute where the silica flour and asbestos were dumped into the asphaltum tanks. The hazard would have been removed in this manner. It is too late now for this company to help the man who has contracted silicosis, but it can prevent his successor from suffering by removing the dust.

"CALORY CARTS" REDUCE FATIGUE. Five "calory carts," traveling enough miles to encircle the earth, have confirmed the theories of physiologists that eating five times a day keeps fatigue away.

Rolling cafeterias, such as the one used at the East Pittsburgh Works of the Westinghouse Electric and Manufacturing Company have demonstrated that extra snacks of food between regular meals help to reduce industrial fatigue and improve the efficiency of factory workers.

Westinghouse sent its first food dispensers through the shops in 1936. Today, five of the "snack wagons" make their rounds of the plants, carrying milk, sandwiches, breakfast rolls, hot dogs, coffee, candy, and cold drinks. On a hot day, as many as 8,000 bottles of milk and cold drinks are sold.

More Than Strikes

Reporting that 8,455,000 mandays were lost through eye accidents in comparison with 6,700,000 lost through strikes, Ira Mosher, vice-president and general manager of the American Optical Company, warned that industrial production for the National Defense Program would suffer seriously unless greater eye safety precautions were taken.

In round figures, he stated, these eye accidents cost American industry $50,000,000 in lost time, medical expenses and compensation.

Mr. Mosher also reported that the average compensation and medical cost for an eye injury is $343, which compares with $194 for all other types of occupational accidents.

He specifically referred to the state of Ohio whose eye injuries in 1940 were exactly the same in percentage figures as those of 1926, despite 14 years of intensive safety education.

Pointing out that American industry is mobilized for national defense and every trained worker is needed, Mr. Mosher declared that eye accidents and the consequent loss of time and money would be materially reduced if workers wore safety goggles on all eye-hazardous jobs.

BALL-BAND
PLANT Safety RECORD!
Hey! What say!
LET'S WORK THE SAFE WAY!
DATE OF LAST "LOST TIME" ACCIDENT
DATE OF LAST FIRE
DIVISION
AUTOMAT
CLOTHING & LEATHER
WAREHOUSE
PLANT PROTECTION
FUEL CELL
WOOLEN
LABORATORIES
PURCHASING RECEIVING
OFFICE
MECHANICAL
FOAM SPONGE
WATERPROOF
ACCIDENT
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
A GREEN ■ LIGHT SIGNIFIES A DAY WITHOUT AN ACCIDENT ★ A RED ■ LIGHT SIGNIFIES DAY ON WHICH AN ACCIDENT OCCURED

Novel Idea

Illustrated is a safety board 18 feet, ten inches long and 10 feet, 10 inches high, used by the Mishawaka Rubber & Woolen Mfg. Co., Mishawaka, Indiana to help promote safety.

Divisional interest is kept at a high pitch by means of chronological standings. In addition a plant wide interest has been created because employees watch every day to see that the green lights are kept burning, one for each day of the month.

Mr. John Raytkwich, Safety Director reports that since January 1, 1941, the firm has more than doubled any previous record by working 2½ million man hours without a disabling injury. In spite of an approximate 80% increase in employment, there has been a 90.5% decrease in accidents. At the same time a 110% increase in minor injuries has been recorded due to insistence that every scratch be reported and treated.

The Mishawaka Rubber & Woolen Mfg. Co. is a firm believer in using various stunts to promote safety and their results certainly justify these efforts.

The first impression would be that these years of safety education had been lost. But we do know that many industrial organizations in Ohio, through the insistence that their employees use goggles or shields, have reduced their eye injuries to practically nothing.

Right off the Docket

The trend of litigation on workmen's health and accident compensation is reflected in these briefs of the latest and most representative cases coming to trial in the intervals between issues. Familiarity with this trend is important to every industrialist.

Lead Poisoning from Fumes Held "Accident."

The employee was engaged in painting a bridge. In this work he used a pressure spray gun. He was exposed to the vaporized lead paint discharged by the spray gun. The first day on the job he asked for a respirator. He was furnished with one, but he claimed that by reason of its age and condition it was only partially effective. After working about a week the employee became disabled. He was found to be suffering from lead poisoning. The defense against the claim for compensation was that the employee had not suffered an accidental injury, but was suffering from a non-compensable occupational disease. This defense was rejected.

The Court stated that an injury to an employee as the result of inhalation of vapor, gas or dust, may constitute an "accidental injury" as defined by the Compensation Act. In this case the acute lead poisoning was contracted in a short space of time, and the happening was sufficiently certain and definite in point of time so as to constitute an "accidental injury."

C. K. Howard & Co. et al. vs. *McKay et al.* (Okla.) 117 Pac. 2nd 525 (Sept.-1941)

Exertion Causes Death from Coronary Sclerosis.

The decedent employee was the janitor of an apartment house. The sewer adjoining the house became clogged and the basement of the house began to fill with water. When the water was two or three feet deep the decedent began to bail it out. During this active and additional work he became ill. Three days later he died from coronary sclerosis. The medical testimony was that the coronary sclerosis, and the resultant death, were caused by the physical exertion expended in connection with the bailing of the water from the cellar.

Hut vs. *LeJack Holding Corp.* (N.Y.) 30 N.Y. Supp. 2nd 35 (Sept.-1941)

Evidence Proves Hernia the Result of Accident.

The defendant company contested a claim for compensation for hernia on the ground that the hernia was not sustained in its employ. It was shown that the employee, a laborer in a lumber mill, was lifting freshly sawed timbers measuring 6 inches by 8 inches, and from 18 to 24 feet long from a table in the planer mill on to a carriage, when he felt a burning sensation in the lower portion of the right side of his abdomen. He was unable to continue the work he was doing, and he asked his brother to take his place at the heavy work while he did lighter tasks. He continued to do light work for a few days during which time he experienced pain. Upon examination by a physician he was found to be suffering from an

incomplete inguinal hernia. The employee after this happening was unable to do any hard manual labor, and since this was the only type of work he knew, or had ever done, this constituted a total disability. It was shown further that the employee was a strong man, and that immediately prior to commencing work at the lumber mill he had been engaged in the hard labor of felling trees, and that at such time he showed no signs of suffering from a hernia. These facts, the Court stated, were sufficient to support a judgment awarding compensation.

Hardy vs. *Wyatt Lumber Co., Inc.* (Louisiana) 3 So. 2nd 607 (June-1941)

Award for Heart Strain Brought On By Heavy Lifting.

While helping to lift a 300 to 350 pound warp beam into a silk loom, the employee suffered a heart strain which resulted in total disability. The employee was 69 years old. The lifting of this beam was part of his regular work. Prior to this accident he had been suffering from degenerative changes usually found in a man of his advanced age, including arteriosclerosis. The Court found these facts sufficient to justify an award.

This event was held to be an "accident" even though the employee was engaged in a task usually performed by him in the regular course of his duties. The heart strain was unexpected and unforseen. It was an undesigned, sudden, and unusual occurrence. The fact that the employee had a weak heart did not prevent an award. Under the Workmen's Compensation Act, a personal injury by accident may include an accidental strain of an employee's heart even though the heart was previously weakened by disease.

Cooke vs. *Cooke & Cole Silk Co., Inc.* (N.J.) 21 Atl. 2nd 853 (Sept.-1941)

Compensation for Eye Injury Refused.

The claimant in this case, a lumber company employee, alleged that he suffered an injury to his right eye when a stick flew up and struck him while he was feeding wood into an oak feeder. He was allowed a claim for medical treatment but refused an allowance for any disability. The employee appealed and the Department of Labor and Industry's decision was reversed and an award of compensation granted. On this present appeal, which was taken from the decision of the lower court, the Supreme Court of Washington reversed the lower court and reinstated the holding of the Department of Labor and Industry.

The Supreme Court stated that where a Department of Labor and Industry's decision is attacked, the burden of proving the decision incorrect is upon the person attacking it. In this case, the medical testimony indicated that the loss of vision of the claimant was due to natural causes rather than to the accident. The proof in support of the claim for compensation was held to be insufficient to overthrow the decision of the Department of Labor and Industry.

Radich vs. *Department of Labor and Industry* (Wash.) 115 Pac. 2nd 1022 (Aug.-1941)

Appendicitis Results from Fall

The claimant was a road superintendent. While engaged in the regular course of his employment in connection with the opening of a road with a snow plow, he stepped into a track in the snow caused by the plow, slipped and fell forward. In trying to extricate himself he suffered injuries in the nature of a traumatic appendix and resultant appendicitis and abscesses, necessitating an operation. The accident was found to be a competent producing cause of the injuries. An award was granted.

Wilson vs. *Town of Covert et al.* (N.Y.) 30 N.Y. Supp. 2nd 34 (Sept.-1940)

Digested and compiled by:
HILTON E. ROBERTS
Member of the Ohio and
New York Bar

JOHNSON ANKLE ACTION RUBBER LADDER SHOES

prevent accidents

★ These shoes are endorsed by insurance companies and safety engineers everywhere.

$1.95 per pair for straight ladders. A trial order will prove their many merits.

JOHNSON LADDER SHOE CO. Eau Claire, Wis.

Industrial Safety Highlights Parade

Vivid portrayal of industry's responsibility in a community's safety program marked Milwaukee's safety parade, sponsored recently to help retain this city's reputation as "America's safest."

Though the parade was designed to show means of eliminating carelessness at home, at work, and on the highways, industrial floats were outstanding among the more than 60 units which proceeded down Milwaukee's main thoroughfare.

Most complete exhibition of safety in the factory was the animated safety stage of the Allis-Chalmers Mfg. Company. A workman illustrated safety precautions in the shop, while a uniformed nurse turned pages of a huge safety manual, model of a book recently distributed to all Allis-Chalmers employees. This handbook represents part of renewed efforts of Allis-Chalmers to retain safest working conditions in shops now over-crowded with Defense production activity.

* * *

Even Then

Eye protection in the 1850's was just as live a subject as today—but with a difference, states American Optical Company. In a catalogue issued by Benjamin Pike, Jr., a leading optician of that time, appears the following description of a new eye-protective goggle:

"Wire gauze goggles or eye protectors: They are a great improvement on the ordinary goggles, preventing the heating of the eye by the contact of the leather mounting and allowing the evaporation from the surface of the eye to pass off unobstructed. They consist of an oval-shaped frame of wire, formed to fit closely around the eye, having caps of fine iron wire gauze, of sufficient convexity to allow the eye lashes to move freely and unobstructed therein."

The purpose of the eye protectors is quite quaint, and Pike's description permits us a real glimpse into those good old days. These goggles "are very serviceable while riding in railroad cars—the sparks from the cinders frequently occasioning serious accidents by their falling in the eye, which the arc of these glasses will prevent."

Protect the Skin

Dr. Victor G. Heiser, Medical Consultant of the National Association of Manufacturers' Committee on Healthful Working Conditions, offers the following practical suggestions for protecting your skin, whatever your job:

1. Wash your hands, arms, face and neck with mild soap (not turpentine or other solvent), warm water, and, if possible, your own soft scrubbing brush, four times every work day—before work, before lunch, after lunch, and after work.

2. Keep your hands, arms, and sleeves away from your face, especially from your forehead and neck. If you sweat freely, wear a clean, soft cloth band around your forehead.

3. Use aprons, gloves, and other protective clothing wherever possible.

4. If necessary to work with an irritant without protective clothing, cover exposed parts of your skin, during working hours, with pastes, creams or oils which cannot be penetrated by the irritant.

5. Hang your work clothes in a dry, clean place at night, especially if you do not have clean work clothes every day.

6. Seek prompt medical advice.

How to Increase Production for 1c a week per worker
Top speed production is the order of the day. Step up the efficiency of your workers' hands with Formula SBS-11 the safe, industrial skin cleanser, and you automatically step up each workers' productivity. Formula SBS-11 quickly, easily, and safely removes grease and grime; helps prevent dermatitis and skin infection. FREE TRIAL: Test Formula SBS-11 in your plant at our expense. Write today for free trial supply to Sugar Beet Products Co., 307 Waller St., Saginaw, Michigan.
Formula SBS-II
THE WASHWORD OF INDUSTRY

The LITERATURE Library

A listing of data available, without cost, to help you in maintaining a health and safety program.

Eye, Foot, Hand Protection—First Aid

No. 01—CORD-ON-END-SOLES—Pamphlet shows how looped cord-on-end structure makes soles more rugged and safe. Panther-Panco Co.

No. 02—FACE SHIELDS—Circular illustrates and describes 36 types of face shields for dust hazards, welding operations and general hazardous work. Boyer-Campbell Co.

No. 03—SPEED FRAME GOGGLE—Sheet points out goggle with automatic position feature. A simple nod of the head positions the goggles. Mine Safety Appliances Co.

No. 04—EYE PROTECTION—Eight page booklet lists a variety of goggles, lenses, spectacles and goggle accessories. Mine Safety Appliances Co.

No. 05—SKULLGARDS—4 page bulletin lists 7 different head protective products. Actual endorsements detailed. Mine Safety Appliances Co.

No. 06—EYE PROTECTION CATALOG—Outline indicates eye hazardous industries, operations and the type of goggle best suited to handle the problem. American Optical Co.

No. 07—"HOW TO FIT GOGGLES"—4 page bulletin tells how to fit goggles and gives tips for maximum performance. American Optical Co.

No. 08—GLOVES—Information on cowhide welding gloves. Double stitched and fully reinforced. American Optical Co.

No. 09—SAFETY SHOES—"The Whole Story" is the name of a 21 page booklet giving data on safety shoes, their application and use. International Shoe Co.

No. 010—KNEE PADS—Sheet illustrates knee pads to be used for those required to work in a kneeling position. Mine Safety Appliances Co.

No. 011—EYES ARE EXPENSIVE TARGETS—16 page booklet brings the matter of eye protection down to a dollars and cents story. Effective as a management tool. American Optical Co.

No. 012—TOP-SIDER SOLE—Sheet describes squeegee action of safety sole. Will grip any surface. Sperry Top-Sider Co.

No. 013—PACKAGED FOOT SAFETY PLAN—Liberally illustrated book gives full information about a new plan for the distribution of safety shoes. Thom McAn Shoe Co.

No. 014—SAFETY SHOE CATALOG—Is a complete buying guide to a broad selection of safety shoes. Full details on construction and recommendations for specific hazards are included. Lehigh Safety Shoe Co.

No. 015—FIRST AID KIT—4 page bulletin talks about dust proof and weather proof first aid kits. Contents of kits given. Mine Safety Appliances Co.

No. 016—SALT TABLETS—Pamphlet reprints article "Keeping in Condition by Using Salt." Prices and full details given. Morton Salt Co.

No. 017—EAR DEFENDERS—4 page booklet refers to ear defenders that reduce the sound level in noisy locations to about 1/10 of the former level. Points out possibility for greater efficiency. Mine Safety Appliances Co.

Sanitation—Good Housekeeping

No. 100—INDUSTRIAL UNIFORM SERVICE—Pamphlet points out a plan whereby soiled garments are exchanged for freshly laundered ones at no inconvenience and with profitable results to the user. Cleveland Overall Co.

No. 101—SCOPE OF SANITATION—64 page book is a treatise on the many chemicals, products and equipment that provide for a sanitary, healthful plant. Handy guides are included. West Disinfecting Co.

No. 102—GROUP WASHING EQUIPMENT—Catalog No. 4010 details various kinds of washfountains, group showers, includes engineering layouts. Drinking fountains and properly planned washrooms also discussed. Individual bulletins on washroom layouts and pictorial applications also available. Bradley Washfountain Co.

No. 103—INDUSTRIAL DERMATITIS—40 page book includes a scientific report on industrial skin diseases. Products for prevention are outlined. Milburn Co.

No. 104—ATHLETE'S FOOT PREVENTIVE—Circular lists user experience with athlete's foot treatment and offers 60 day trial. Onox Co.

TO GET FREE COPIES of material described on this page write to OCCUPATIONAL HAZARDS, 812 Huron Rd., Cleveland, Ohio, giving the individual number of the pieces desired.

No. 105—HAND CLEANER—Pamphlet is a "question and answer" account of how this industrial cleaner is being used effectively by industry. Individual circulars for specialties are available. West Disinfecting Co.

No. 106—FLOOR SCRUBBING MACHINES—4 page bulletin describes a machine that scrubs, polishes, sands, etc., as interchangeable attachments are used. Hild Machine Co.

No. 107—PAPER CUPS—Information regarding the need for paper cups in industry. Free offer made. Lily Tulip Cup Corp.

No. 108—FOOT POWDER—Athlete's Foot powder is furnished in either white stainless form or a slight tracer form. Remains stable in solution. C. B. Dolge Co.

No. 109—SKIN CLEANSER—Generous free trial supply of industrial hand soap is made. Circulars containing specific information available. Sugar Beet Products Co.

No. 110—POWDERED HAND SOAPS—Soap available in various consistencies for specific job. Descriptive literature issued. Lightfoot Schultz Co.

Plant Protection—Maintenance

No. 200—PLANT PROTECTION FOR DEFENSE—Modernized manual of rules, regulations and instructive information to guide watchmen, guards and supervising personnel. Detex Watchclock Corp.

No. 201—SLING CHAINS—4 page catalog sheet details safe working loads, gives dimensions and offers a buying guide for sling chains. McKay Company.

No. 202—INDUSTRIAL WIRE ROPE—96 page catalog contains specific recommendations as to the constructions best suited for various types of cranes and industrial equipment. Broderick & Bascom Co.

No. 203—FLOOR FINISH—Catalog page describes penetrating floor finish that provides an attractive surface as well as preservation of the floor. Truscon Laboratories, Inc.

No. 204—UNIT HEATERS—36 page catalog points out the advantages of unit heaters, gives helpful engineering data including tables, illustrations and piping diagrams. Ilg Electric & Ventilating Co.

No. 205—FLOOR MAINTENANCE—30 page booklet refers to specific material that can be used for properly maintaining all types of floors. Thoroughly detailed and a valuable maintenance manual. West Disinfecting Co.

No. 206—FLOOR PRESERVATION—Literature on floor scrubbing machines indicating safety and maintenance features. Data on products such as waxes, finishes, etc. available. Finnell Co.

No. 207—INDUSTRIAL VITAMIN PLAN—Detailed account of how vitamin pills are now available to industry. User experience listed. Industrial Vitamin Corp.

Protection Against Dusts, Fumes, Gases

No. 300—DUST COLLECTING SYSTEMS—Spiral bound book is both a word and picture presentation of industry's acceptance of skillfully engineered dust control systems. Various accessory equipment detailed. Kirk & Blum Mfg. Co.

No. 301—VENTILATING EQUIPMENT—Catalog page describes ventilating apparatus that is designed to remove various harmful fumes and vapors. Recorded air changes, diagrammatic sketches included. Autovent Fan & Blower Co. Div. Herman Nelson Corp.

No. 302—INDUSTRIAL DUST CONTROL—20 page book is a discussion of the basic principles applied to the solution of industrial dust problems. Inserted questionnaire can be used for individual cases. W. W. Sly Mfg. Co.

No. 303—CONDUCTIVE SAFETY SHOES—Informative booklet points out how conductive safety shoes have been made available to control the damage done by static electricity. International Shoe Co.

No. 304—AIRLINE RESPIRATOR—Bulletin CS-6 points out use for an airline respirator with cartridge filter. Auxiliary attachments outlined. Mine Safety Appliances Co.

No. 305—OXYGEN BREATHING APPARATUS—Material descriptive of 2 hour, 1 hour, and ½ hour oxygen breathing apparatus that provides for various periods of respiratory protection. Bulletins are BB-1, BM-2, BC-2. Mine Safety Appliances Co.

No. 306—FUME AND GAS INDICATORS—Catalog sheets and bulletins referring to indicators for benzol, combustible gas, carbon monoxide and hydrogen sulphide. Recorders for oxygen, methane and electrostatic dust and fume sampler also have descriptive data. Mine Safety Appliances Co.

No. 307—PURAIR HELMET—4 page bulletin No. 97 describes a helmet particularly applicable in sand blast operations. W. W. Sly Mfg. Co.

No. 308—DUST COLLECTORS—Bulletin No. 903 describes engineering features available in this dust control equipment. Includes recommendations, specifications and list of users. Pangborn Corp.

No. 309—QUESTIONS AND ANSWERS CONCERNING DUSTS—16 pages of questions and answers are devoted to explaining in non-technical language the problems that continually arise regarding the nature and effects of dust. Mine Safety Appliances Co.

No. 310—FANS AND BLOWERS—Catalog 220 contains engineering data, pictures and details on multiblade fans. Literature on propeller fans, fans for high temperatures also. Garden City Fan.

No. 311—VACUUM CLEANING—"The Menace of Dust" is a circular that points out uses for heavy duty vacuum cleaning equipment in industry. Adjustments and tools for greater efficiency are discussed. U. S. Hoffman Machinery Corp.

TO GET FREE COPIES of material described on this page write to OCCUPATIONAL HAZARDS, 812 Huron Rd., Cleveland, Ohio, giving the individual number of the pieces desired.

BLACKOUT THE SHADOW!

CLOSE to all of us is the threatening spectre of tuberculosis. No respecter of persons, it lurks in every corner, may strike at any moment. *More people between 15 and 45 die from tuberculosis than from any other disease.*

Yet tuberculosis *can* be driven from the face of the earth. Since 1907 your Local Tuberculosis Association has helped reduce the toll of tuberculosis by 75%!

By buying Christmas Seals you will help us complete the job—and make this a safer world for yourself and your loved ones.

Buy
CHRISTMAS
SEALS

Young Workers—

from page 9

1940 there were 238 deaths in each thousand injuries. Were it not for Order No. 1, some of the victims of the recent explosions in munitions plants might well have been young boys and girls on the threshold of productive working careers.

Coal mining

The public, through the press, knows only about the coal-mine disasters which bring death to scores of men. But many more men are killed or injured each year by falls of roof or face, mine cars, handling materials, and other causes involving only one or a few workers, than are killed or injured in the more spectacular or publicized disasters.

In any event, the coal-mine industry involves an exceptionally high degree of accident risk in comparison with most other industries. During the 5-year period 1933-37, for example, the frequency rate of disabling injuries was 87.9 per 1,000,000 man-hours for the entire coal-mine industry of the United States. For manufacturing as a whole, the rate was 17.7. The frequency of fatal injuries in coal mines during the same period was over 13 times as great as for manufacturing as a whole.

Because the accident risk in coal-mine work is probably particularly high for young workers, who are characteristically lacking in the experience and caution needed for such work, and because the preponderance of opinion of safety engineers, mine inspectors, and other experts consulted was that such work is too hazardous for minors under 18, Order No. 3 was issued effective September 1, 1940.

Order No. 3 declared all underground work in coal mines, and all surface work, with a few specific exceptions, to be particularly hazardous for the employment of boys under 18 years of age. The effect of the order has been to close to minors nearly all employment in one of the most hazardous of American industries.

Other hazards will be discussed in a subsequent issue.

Health at Hamilton—

from page 13

September 13, 1938, to March 18, 1940.

(5) Increased use of first aid facilities

(6) Number of members of employees' families x-rayed after tuberculin test. All who showed positive reactions were x-rayed at the employee's expense (January, 1939).

(7) All employees who showed positive reaction to tuberculin test, re-x-rayed at company's expense (January, 1939).

(8) Special urinalysis for group policyholders through the Prudential Longevity Service (June 22, 1939).

(9) Improvement in handling hygiene problems as they arise, due to experience.

II. Developed Safety Consciousness

(1) Safety meetings: The minutes of the Workmen's Safety Committee meetings, first Tuesday of each month, are posted in five places about the shop not later than third day after meeting, and these minutes are quite detailed, showing all of the points that have been discussed. Foremen's Safety Committee meeting minutes are not posted.

(2) Interest in safety lectures and literature.

(3) 361 safety recommendations reported from September 13, 1938, to March 18, 1940.

(4) Increased use of first aid facilities.

(5) Increased use of safety shoes.

III. Improved Plant Maintenance

(1) Correcting conditions covered by 347 safety and hygiene recommendations.

(2) 65 maintenance recommendations.

(3) 3 fire hazard elimination recommendations.

(4) Pride in improved appearance—better housekeeping

DUPOR RESPIRATORS

Win 6th Annual Modern Plastics Competition

Complete results of this unusual competition are found in November, Award Issue of Modern Plastics magazine. H. S. Cover wishes to thank the judges for the honors bestowed on his products.

H. S. COVER 36 Chippewa St. South Bend, Ind.

THE WORK IS AT THE BENDS
USE FLEXAUST
BLOWER HOSE
FOR ELBOWS IN BLOW PIPE SYSTEMS
3" to 28" Diameter
Write for particulars
HERSEY & COMPANY, INC.
2029 Minor No., Seattle, Wash.

and less waste of supplies and materials.

IV. Accident experience improvement to be proved over period of time.

V. No great expense—no increase in personnel, as our personnel director, employment manager, and safety director is all the same individual, plus the president's personal interest.

Here is the improvement record—

Improvements in Physical Properties:

(a) Shower, locker, and toilet rooms
(b) Drinking fountains
(c) Lunch room facilities
(d) New lighting system in No. 3 Foundry
(e) New lighting systems in No. 1 and No. 3 Pattern Storages

Improvements in Use of Safety Equipment:

(a) Protective spectacles or goggles for inspectors
(b) Use of safety shoes
(c) Respirators for shakeout laborers
(d) Respirators for sand slinger operators
(e) Light calabor lenses substituted for clear lenses in goggles of shank pushers and pour-off men

Improvement in General Good Housekeeping throughout the Plant:

(a) Cleanliness in shower, locker, and toilet rooms
(b) Monthly clothes locker inspection
(c) Disinfectant foot-bath in shower room to prevent athlete's foot
(d) New ladle lining facilities in No. 4 Foundry; gas fired instead of coke fired
(e) Exhaust fan installed in No. 3 Foundry for cupola area
(f) Rotary lift or levelator and shipping platform
(g) Clamp and gagger racks in No. 2 and No. 3 Foundries

Elimination of Many Unsafe Tools and Practices:

(a) Reduction in usage of mushroomed head chisels, punches, hammers, etc.
(b) Reduction in usage of files as punches
(c) Reduction in usage of cracked handles in hammers
(d) Better condition of safety appliances, such as leggings, goggles, etc.
(e) No one to enter Cleaning Department without goggles

NEW PRODUCTS

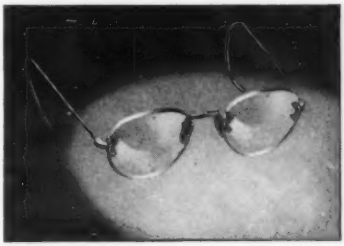
RESPIRATOR—The new and improved M. S. A. Single Filter Dustfoe Respirator is announced by the Mine Safety Appliances Company, Pittsburgh, Pa.

Featured improvement of the Dustfoe is the new Single Filter which replaces the two-part (felt screen and cellulose) filters used previously. This new filter is all in one piece, giving U. S. Bureau of Mines-approved protection against an even broader range of dusts and mists, states the manufacturer. The filter is more porous

on the outer side so that the larger dust particles are filtered out first, thus preventing rapid build-up of breathing resistance through clogging of filter.

Another feature claimed for the respirator is that it can be completely disassembled without tools in a few seconds; every part is interchangeable, and, except for the filters, can be washed and sterilized. The inexpensive single throwaway filters permit a fresh, new filter with each cleaning.

SAFETY SPECTACLES—The Tulca Division of the Univis Lens Company, Dayton, Ohio, has added a new, rimless-type, safety spectacle to its eye protection line. The "Supervisor" spectacle is fitted with the company's special material (not glass) Tulca Safety Lenses, with or without side shields.



According to the manufacturer these safety spectacles are as comfortable and as pleasing in appearance as regular eye-glasses because of the extremely light weight of the Tulca Lenses. They were designed specifically for use by supervisors, checkers, inspectors, maintenance men, and by visitors who are exposed to eye hazards in plants, even though they are not actively engaged in operations where the wearing of goggles is mandatory.

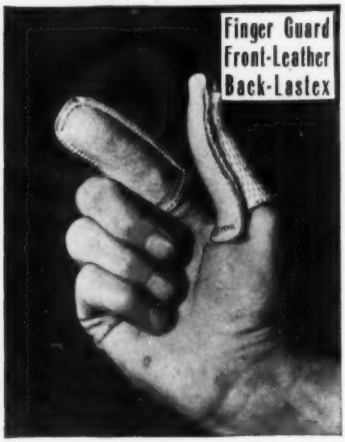
NEW ACID MASK—Complete head and neck protection for workers handling acid and other dangerous solutions is provided by the Bullard Acid Mask as manufactured by E. D. Bullard Company, San Francisco. The shatter-proof laminated goggles fit snugly around the eye cavities so that the hood cannot slip or turn.

Form-fitting shoulders offer full neck and chest protection. There is ample impregnated cloth to tuck into other clothing, so that all vital parts of the body are protected. Seams are double stitched—then rubber cemented to add longer wear. Where the hood must be worn for long pe-

riods, ask for information on forced air ventilation attachments, as this

hood does not provide respiratory protection.

FINGER GUARD—A practical finger guard, or finger stall, combining tough leather and flexible lastex has recently been designed by the Indus-



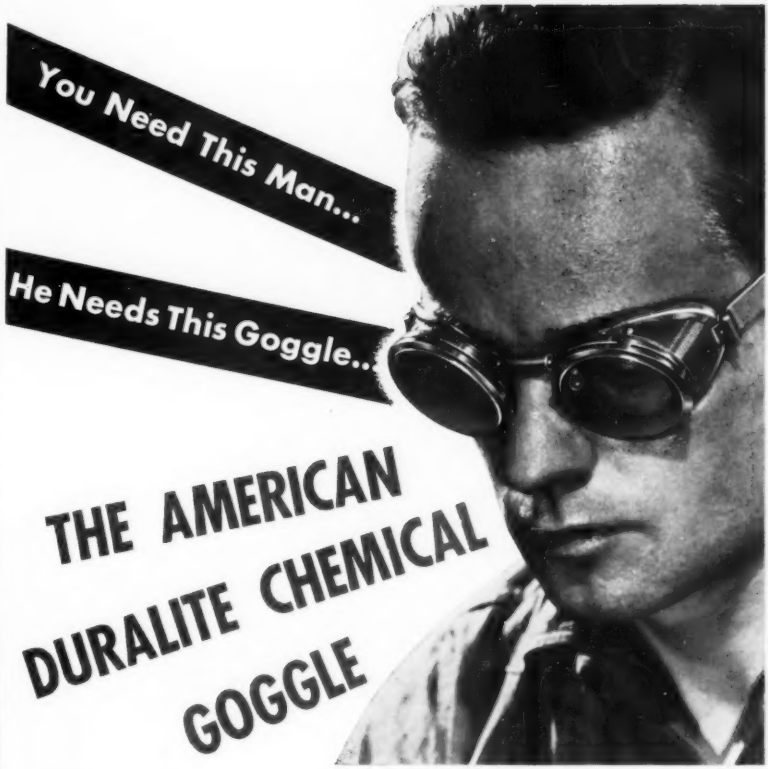
trial Gloves Company of Danville, Illinois. It is claimed that this new safeguard is comfortable, clean, easy on, easy off, light weight and durable. Gives protection on fingers and thumb, in any combination, to buffers, polishers, sanders, grinders, operators of stamping-out presses, assemblers of small parts, book binders, trimmers, mechanics and machine operators, both women and men.

May be worn *under* glove for extra protection. Does away with tender skin due to taping fingers and the frequent trips to First Aid room for tape or bandage. If worn with leather on back of finger, Steel-Grip finger guard protects knuckles from raps, cuts, abrasions. Illustration shows grain leather and lastex combination. May also be had in heavy split leather, light weight kid leather or wool felt. The lastex feature makes Steel-Grip finger guards snug fitting, always flexible and porous for ventilation.

NEW BOOK—EYE HAZARDS IN INDUSTRY—by Louis Resnick, is a book that contains a complete synthesis of what is known on the subject of eye hazards in industry. It is not a swivel-chair book, but the direct product of many personal investigations of industrial plants, interviews with industrial workers, foremen, safety directors, doctors and nurses, and finally with those whose eyes have been injured. Nor is this book the product of a single mind, but instead the result of the collaboration of hundreds of safety engineers, physicians, surgeons, executives, government officials, insurance men, safety device manufacturers, dealers, and consumers.

It shows how these hazards may be eliminated or how the workers can be guarded against those that cannot be eliminated.

This is a handbook for safety engineers, safety inspectors, and all connected actively in accident prevention generally and sight conservation in particular. Published by the National Society for the Prevention of Blindness, it is available at $3.50.



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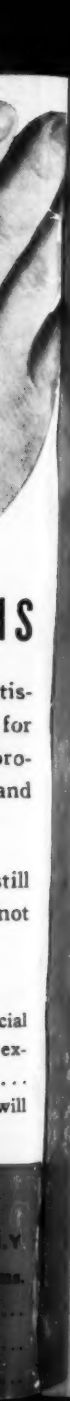
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